

# COLLABORATION IN STEM EDUCATION

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## Finding the Culprit

### Case Profile and Status of Investigation

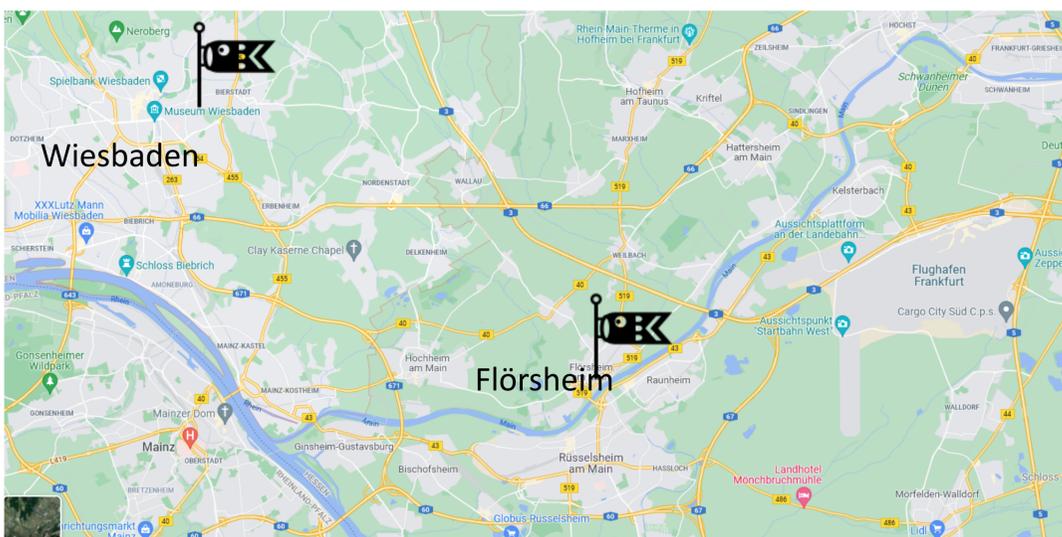
A crime scene, a wounded secret agent, eleven well-known suspects – 24 students from two different schools take on the roles of police detectives and embark on a fascinating journey into forensic science. Will they be able to examine all the traces and find the true culprit?

Using varying scientific methods from the fields of biology, chemistry, physics and mathematics, the young detectives learn how to conduct scientific experiments and draw conclusions whilst cooperating in a team. Their investigation includes:

- the microscopic analysis of fibre samples,
- the comparison of fingerprints and footprints,
- the performance of a chemical blood test,
- the examination of substance properties (e.g. solubility, flame colouration, ...),
- the analysis of the refraction properties of lenses,
- the reconstruction of a bullet trajectory.



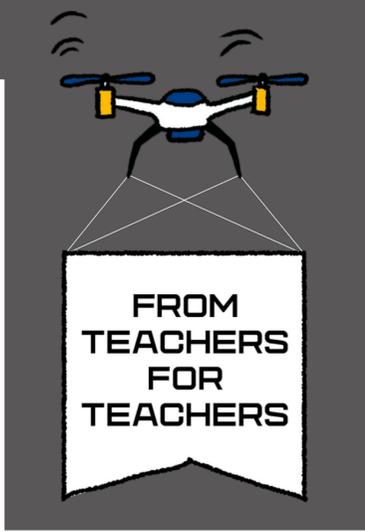
The detectives are hand-picked by their science teachers from all students in Year 5 based on their behaviour, their general abilities, as well as their in-class performances in science subjects.



### The Collaboration ...

- ...is established between two schools from the Rhein-Main area with a focus on science education and talent management.
- ...includes work in both schools' laboratories as well as on the "crime scene".
- ...is characterized by a high degree of sustainability due to the project's resource-friendly annual realization with established materials.

**Conclusion:** "Finding the Culprit" is a thrilling annual cooperative science project which enables students to expand their scientific knowledge and competences beyond the classroom whilst strengthening their social skills at the same time.



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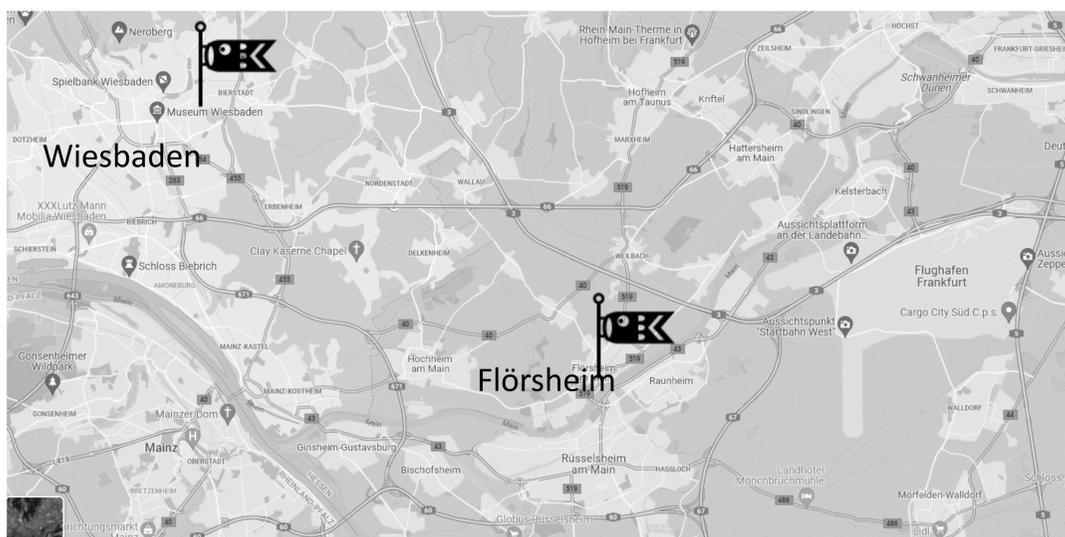
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